

# CONTRACTORS STATE LICENSE BOARD LICENSE EXAMINATION STUDY GUIDE



## **REINFORCING STEEL (C-50)**

#### Content of the Examination

The Reinforcing Steel (C-50) Examination is divided into five major sections:

#### 1. Planning and Estimating (35%)

- Plans and specifications
- Types and grades of reinforcing steel
- Determining quantities of materials
- Estimating costs

#### 2. Fabrication (10%)

- Preparation
- Fabrication

## 3. Layout and Placement of Reinforcing Steel (25%)

- Placing marks
- Setting templates
- Setting bar supports
- Placing and tying reinforcing steel

# 4. Post-Tensioned Cables and Specialty Projects (8%)

- Layout and placement of cables
- Stressing cables
- Placing reinforcing steel in special locations

#### 5. Safety (22%)

- Personnel safety
- Equipment and job site safety

\*Percentages are approximate\*

#### **Test Policy**

This is a closed-book examination. No reference materials may be used during the examination.

#### **Test Strategy**

This is a multiple-choice examination with four choices per question. Examination questions are written to provide only one BEST answer. Some questions require mathematical computation. A calculator will be provided.

There is no penalty for guessing. If you are unsure about a particular question, it is better to try to answer the question than to leave the question blank.

Plenty of time is provided to answer all examination questions, so be sure to read each question and its four choices completely and carefully before selecting the BEST possible answer to the question.

#### **Sample Questions**

Below are three typical examination questions. The correct answer is marked with an asterisk (\*).

- 1. A contractor determines that a particular job will take three workers an 8-hour day to install 50 feet of retaining wall reinforcement. The labor cost is \$43 per person per hour and the wall is 300 feet long. What is the total labor cost for the job?
  - **a.** \$1,032
  - **b.** \$2,150
  - **c.** \$6,192\*
  - **d.** \$12,900
- **2.** The pull-through method of tendon placement uses which of the following types of tendons?
  - a. Single-strand tendons
  - **b.** Multi-strand tendons\*
  - c. Lubricated tendons
  - d. Bar tendons
- **3.** What is the MINIMUM hook length as measured from the center of the bending pin for a standard 90-degree hook?
  - **a.** 8"
  - **b**. 12"
  - **c.** 4d
  - **d.** 12d\*

#### Resources

Publisher information for reference books and code is provided below. Other sources for reference books may be found online.

California code books can be viewed online: www.dgs.ca.gov/bsc

## Construction and Maintenance Manual for Post-Tensioned Slab-on-Ground Foundations.

Post-Tensioning Institute. PHONE: (248) 848-3180

INTERNET: www.post-tensioning.org

#### Manual of Standard Practice. Concrete

Reinforcing Steel Institute. PHONE: (847) 517-1200 INTERNET: www.crsi.org

### Placing Reinforcing Bars. Concrete Reinforcing

Steel Institute.

PHONE: (847) 517-1200 INTERNET: www.crsi.org

## Post-Tensioning Manual. Post-Tensioning

Institute.

PHONE: (248) 848-3180

INTERNET: www.post-tensioning.org

# State of California General Industry & Electrical Safety Orders (Cal/OSHA) and State of California Construction & Electrical Safety Orders (Cal/OSHA). 2023. California Code of

Regulations, Title 8. Mancomm.

PHONE: (877) 626-2666

INTERNET: www.mancomm.com

**VIEW ONLINE:** 

www.dir.ca.gov/dosh/LawsAndRegulations.htm

\*Publisher information is current as of 1/23\*

<sup>\*</sup>All questions are written and reviewed by licensed contractors who are actively working in the trade\*